# How to Install your Datatool Compact Alarm System.

This alarm is designed for use with motorcycles which have a 12 volt DC Negative earth electrical system.

#### Installation

#### 1) Planning the Installation

- · Before beginning, plan where to mount the control unit and where to run the wiring.
- Ensure that the control unit and wiring are hidden and protected from extremes of heat and weather and will not obstruct the functions of the motorcycle.
- Familiarise yourself with the relevant colour codes of the alarm cables.
- · Plan where you will make connections before adapting the alarm wiring.
- · For reliability, we recommend soldered joints, insulated with heatshrink tubing.
- If you use any other type of connection, ensure that it is securely made <u>and</u> insulated.

You will need the following equipment:

- Pliers/cable cutters
- Insulation tape
- Motorcycle tool kit

- Soldering equipment
- Heatshrink tubing

#### 2) Positioning the Control Unit

Whilst the control unit is tough and waterproof, you should choose the most protected position available, this will make it resistant to tampering. Extremes of heat created by the exhaust system or engine must be avoided. Under the seat or inside the fairing bodywork are the best locations.

#### 3) Connection of Ignition Sense Wire. (1 x Brown wire)

As the name suggests, this wire 'senses' when the ignition is live. It has three functions;

- . Detects when the ignition is forceably switched on (hotwired), or by-passed, with the alarm active.
- · Prevents the system from arming accidentally whilst the ignition is switched on.
- Powers the alarm if the supply feed or alarm fuse fails.

Connect the brown lead from the alarm loom to any wire in the ignition system which becomes live when the ignition is switched on. The power cable to the stop light switch is ideal.

### 4) Connection of Earth Wire. (1 x Plain Black wire)

Connect this wire to the motorcycle frame or the battery negative terminal.

#### 5) Connection of Indicator Wires (2 x Pink wires)

Solder the two Pink wires to the left and right indicator feed wires.

### 6) LED Wires (1 x Grey wire and 1 x Orange wire)

Locate the system indicator LED in a visible position which can easily be drilled. Protect the location with masking tape, make a pilot mark with a sharp object, check that there is adequate clearance behind the location and carefully drill an 8mm hole. Push the LED through the drilled hole from the underside, slide the holder over the LED, then push the the holder into the drilled hole. Solder the LED wires to the corresponding coloured wires on the alarm and insulate.

### 7) External Trigger (1 x Green/Yellow wire)

The Green/Yellow wire is the external trigger (for additional siren, radio pager etc.) and should be insulated and secured if not used.

#### 8) Programming/Security Loop Wires (1x Green wire, 1 x Purple wire and 1 x Green/Purple wire)

These wires are for (a) customisation of arming method/movement detection (b) programming extra transmitters (c) use as a security loop and are not normally used. They should be isolated from each other and secured safely. For programming details, see overleaf.

#### 9) Connection to Power (1 x Red wire)

Finally, connect the alarm system to the power circuit of the motorcycle. This should be done directly to the battery positive terminal. The in-line fuse is pre-mounted in the alarm loom, next to the alarm control unit. The fuse is rated at 3 amps.

#### IMPORTANTI

We take great care in the design, manufacture and quality of Datatool products. However, unless the system is installed correctly, it will not function satisfactorily in the long term. Please make sure that all electrical joints are sound and will stand extremes of weather, including winter riding conditions. If you experience problems with the system, please check that all connections are made soundly and in the correct location.

#### Testing and set up

The system monitors the ignition circuit, the battery circuit and the position of the motorcycle. Data relevant to these zones is stored in the memory of the micro-processor. Any change in this data causes the alarm to react, by sounding the powerful internal siren and flashing the indicators. The reaction will last for thirty seconds. The system will then reset and resume protection of your bike. After each reaction cycle, the LED will flash at double speed indicating that the alarm has protected your bike.

#### 1) Test Arming Functions

Press the the circle on the remote control, the alarm will beep twice, indicating that it has armed. The LED will illuminate constantly for 5 seconds whilst the system monitors the status of the ignition circuit and movement sensor, it will then start to flash. The alarm is dis-armed by pressing the circle, disarming is indicated by a single beep from the alarm, the LED will also go out.

#### 2) Setting Up Movement Detection

The movement sensor should be fitted across the motorcycle (so that the lead exits towards the left or right side of the bike, not front or back), nearly horizontal with the ground, as indicated in the diagram. The sensor is most sensitive when horizontal and

increasingly less so when rotated towards the vertical. Adjust the sensitivity to your preference. When the motorcycle is moved, the alarm will trigger and a full reaction will occur. The movement sensor can be fixed to the motorcycle with the self-tapping screws provided.



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## 3) Test Reaction Functions

With the system armed, create a reaction by switching on the ignition. For a period of around 30 seconds, the siren will sound and the indicators will

flash. After this period the alarm should re-set and the LED should flash rapidly to indicate that a reaction has occurred. Repeat the above process, moving the bike instead of switching on the ignition, full reaction will be preceded by a series of warning beeps.

#### Care & Maintenance

Transmitter - The transmitter contains delicate electronic circuits and must be protected from impact and water damage. Change the battery every year, or if the LED flashes when the circle is pressed.

Control Unit - The control unit also contains delicate electronic circuits and must never be pressure washed or

Motorcycle Battery -The alarm system consumes less than 3mA when in use. If the motorcycle is parked or stored for a long period, or has a small or old battery, the motorcycle battery can eventually discharge. Intelligent battery chargers and optimisers are available to maintain the battery in top condition. Recommended types are Optimate and Airflow (DATATOOL Part Nos. 02012011 and 02012009 respectively). DATATOOL does not recommend that any other charging device is used unless the system is disarmed and the in-line fuse removed.

### Warranty Terms and Conditions

Please keep your purchase invoice carefully. This will help us to handle any warranty enquiries quickly. The warranty does not affect your statutory rights. The warranty period is 12 months from date of purchase, only applies to UK registered motorcycles and is only applicable to the original purchaser/owner. If within the warranty period the system proves to be defective by reason of faulty design, workmanship or materials, we undertake, subject to the following conditions, to have the defective system repaired or, at our discretion, replaced:

- · The system must have been used in accordance with the installation and operating instructions
- Any attempt by an unauthorised individual to repair or modify the system will render the warranty null and void
- No liability will be accepted for any costs incurred where: no fault is found; the fault lies with the motorcycle
  or the fuses to the system or motorcycle; transmitters have been lost, damaged or have discharged batteries;
  assistance has been provided other than through the DATATOOL dealer network without prior approval from
  DATATOOL; any defect or failure has been caused by outside force to, or misuse of, the system.

# Programming the system to your preference

#### 1) Movement Detection

As supplied, the system is set to operate in Pre-Reaction Alert mode. In this mode, warning beeps will sound if the motorcycle is nudged or moved. Too many beeps within a certain time will initiate a full alarm reaction. This is to minimise inconvenience to you, and your neighbours! You also have the option of setting the movement sensor to react instantly it detects movement of the motorcycle (Instant Trigger mode). To change mode;

- 1. Ensure the alarm is disarmed and the motorcycle ignition is switched off
- 2. Ensure the green alarm wire is isolated (not connected to anything)
- 3. Connect the purple alarm wire to the green/purple wire then connect both to the positive battery terminal
- 4. Switch on the motorcycle ignition and wait 3 seconds one beep will indicate that the system has switched to Instant Trigger mode, two beeps indicates alarm is in Pre-Reaction Alert mode
- 5. To exit setup mode, return alarm and motorcycle to original condition
- 6. To change mode, repeat steps 1 through 5

#### 2) Manual or Automatic Arming

As supplied, the system is set for manual arming. You also have the option to change to automatic arming, whereby the alarm automatically arms thirty seconds after the motorcycle ignition has been switched off (the alarm can still be armed using the transmitter during this thirty second period if required). To change mode;

- 1. Ensure the alarm is disarmed and the motorcycle ignition is switched off
- 2. Connect the purple, green and green/purple wires together then connect all to the positive battery terminal
- 3. Switch on the motorcycle ignition two beeps will indicate that the system has switched to Auto Arming, one beep indicates alarm is in Manual Arming mode
- 4. Switch off the motorcycle ignition
- 5. To exit setup mode, disconnect the purple, green and green/purple wires from the battery positive terminal and from each other. Return alarm and motorcycle to original state
- 6. To change mode, repeat steps 1 through 5

#### General Security

The DATATOOL Compact 2 Alarm system will provide an effective deterrent against theft. It will not in itself guarantee that your motorcycle is not stolen or damaged. We strongly advise that your alarm is used in conjunction with basic anti-theft precautions.

A range of accessories are available to extend the performance of your alarm system. These are available from your dealer or distributor and include:

- · Additional Transmitters
- Additional Sirens (110dB or 115dB)
- Plug In Garage Security System
- Pocket Paging Alert
- Intelligent Battery Chargers / Optimisers
   Security Socket

There are two security loop circuits on the Compact 2. Use either the Green and Green/Purple wires or the Purple and Green/Purple wires. Both can be used if required but do not loop the Green wire with the Purple wire.

# How to operate your Datatool Compact Alarm System

## Operation

The system is controlled by the remote control radio transmitter.

To arm the system, press the circle symbol on the remote control.

Arming is indicated by a double beep and illumination of the LED.

After a 5 second monitor period, the system engages and the LED starts to flash.

The motorcycle is now protected against ignition hotwire or movement. If the system is activated, the alarm sounds for 30 seconds and then re-sets automatically. After a reaction, the LED will flash at double speed to warn you that the alarm has been activated.

To disarm the system, press the circle key. You will hear a beep and the LED will extinguish.



**Rider Information & Security Systems** 

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